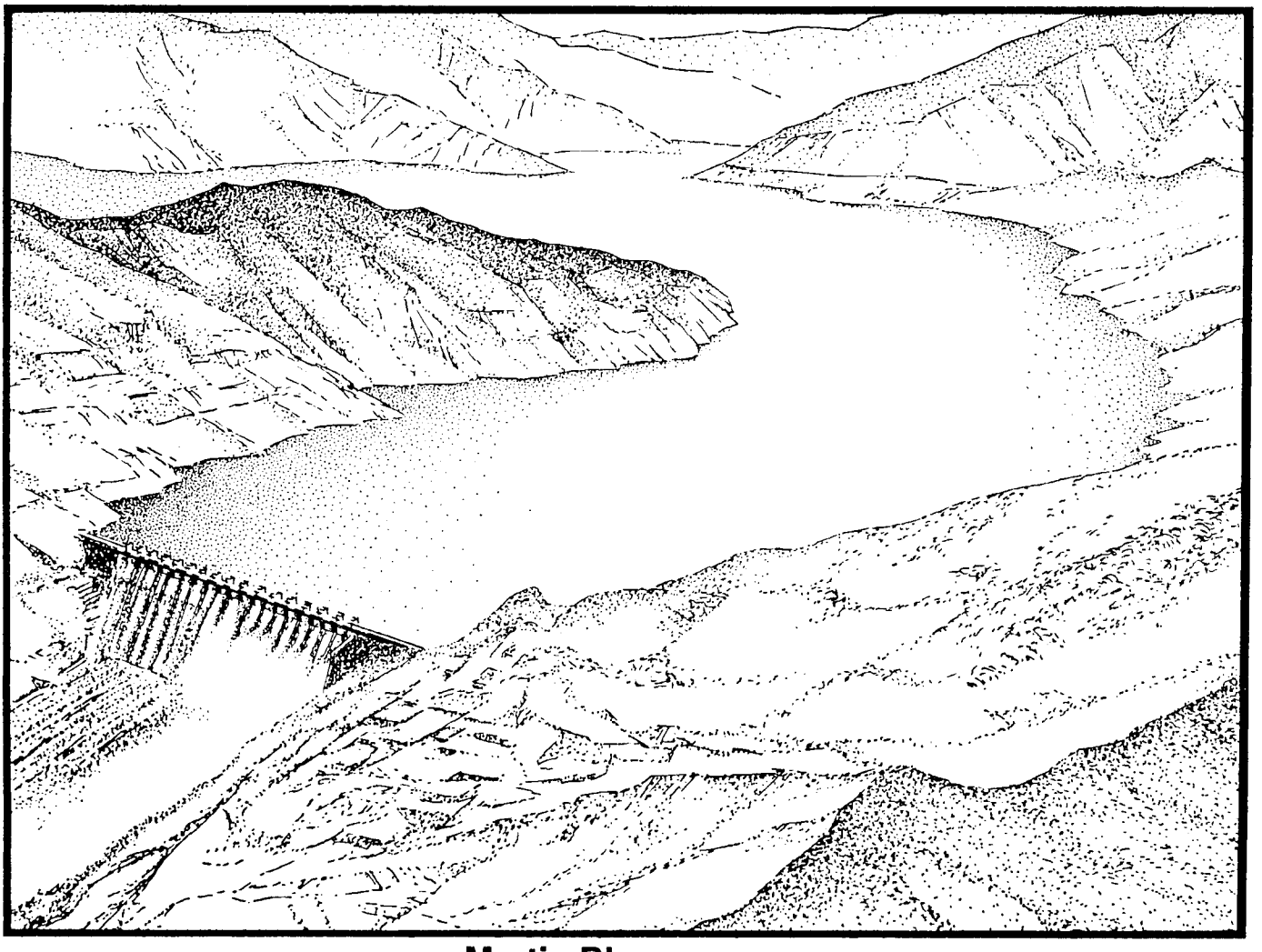
Hwachon Dam--Korea, 1951

The 4th Ranger Company and the 7th Cavalry in Action



Martin Blumenson

EDITOR'S NOTE: This article is an edited and abridged version of "The Rangers at Hwachon Dam," which appeared in the December 1967 issue of Army *Magazine (copyright 1967 by the Association of the United States Army and reproduced by permission). That article was based on a series of interviews the author conducted in Korea, which are filed with Eighth Army's command report for April 1951.*

Martin Blumenson served in World War II and in Korea and has made many contributions to the field of military history, including official histories published by the U.S. Army Center of Military History.

The reprint was suggested by Mr. Edward L. Daily, Past President of the 7th Cavalry Association, who served in the 7th Cavalry in Korea.

It was early April in the first year of the Korean War and Spring had yet to come in 1951. Winter winds still whipped down river near Hongchon, tugging at tent ropes, but failing to dispel the mist or the edginess.

When a sudden hint of warm weather melted some of the snow and sent water down the mountains, the current picked up speed around the sand bar, the channels on both sides deepened, and the fords became dangerous. It was then that the anxiety took on a name: Hwachon Dam.

The dam was in a mountainous region of steep-sided and trackless peaks, and among the hills an elongated spot of blue marked the existence of a large reservoir nestled among the partially wooded slopes rising abruptly from the water. The natural curves of the shore line contrasted with the short, straight lip of the dam.

One of the largest dams in Korea, it holds back the Pukhan River and creates a lake 13 miles long and a mile or so wide. The trouble was that the dam and the reservoir lay in enemy territory, and the river flowed down the middle of what was then the U.S. IX Corps area.

All across the Korean peninsula, Eighth Army was grinding forward slowly. In the central part, IX Corps had fought north to Hongchon, then another 20 miles to Chunchon. Now, along a single avenue, the only road of consequence, the troops were going still another 20 miles, across the 38th parallel into North Korea. Ten miles above the parallel, at the shore of the reservoir, they would be at Phase Line Kansas, a place marked by a slash of grease-pencil across the map. There they would pause. Some units needing rest would be replaced, roads would be improved, ammunition and other supplies would be accumulated, and preparations made for another push.

Stopping temporarily at the Kansas line would leave the Hwachon Dam reservoir in the hands of the Chinese Communist forces.

If the Chinese released the water held by the dam, they could send a flood roaring down the Pukhan River, gouge a channel down the middle of the corps, wash away bridges, command posts, supply dumps, and other installations, break the corps in two, and separate—and in some places isolate—the troops in each portion.

The Hwachon Dam gates are massive doors, six by ten yards, each weighing several tons. Raising each gate by hand would take about ten hours. Thus, water released would emerge gradually. Once out, it would spread across low areas. The depth of a flood would vary according to the width of the river channel at any particular point.

The worst that might happen was a rise of ten to 12 feet, which was bad enough. It would rip out bridges, cover the Chunchon plain with at least a foot of water, back up and swell the tributary streams, and hamper—perhaps halt—the operations of the Corps.

Were the Chinese then planning to use the water in the reservoir as a weapon? Were they raising the water level in order to inundate the Corps by opening the penstocks and gates?

Lieutenant General Matthew B. Ridgway, who then commanded Eighth Army, was aware of the dams in Korea. A month earlier, he had asked particularly about Hwachon Dam. What would happen if he had it destroyed by air bombardment? The answer persuaded him to leave it intact. The reservoir and dam gave water and electric power to the capital city of Seoul. There was no point in ruining a mechanism that would fall into the hands of the United Nations forces after the troops moved beyond the Kansas line.

More immediately alive to the danger of Hwachon Dam was the IX Corps commander, then Major General William M. Hoge. He had a suggestion: If the Chinese released the water in the reservoir, he could send a small group to the dam to close the gates, then blast shut the machinery—the mechanical hoists that raised and lowered the heavy doors. With the gates thus fixed in the closed position, any surplus water would flow over the dam, and there would be no possibility of artificial flooding. Once the Army advanced past Kansas and took permanent possession of the dam, it would be easy enough to repair the damage.

Ridgway liked the idea. He told Hoge to go ahead, but cautioned him to keep casualties to the fewest.

Hoge was sure he could do the job with few losses. His combat command of the 9th Armored Division had captured the Remagen bridge during World War II, and he knew how to

make a lightning thrust. There was no reason why Hwachon Dam should be tough. Especially since one of the Army's great combat outfits—the 1st Cavalry Division—had reached Phase Line Kansas just below the structure. The division, cavalry in name only, was composed of infantrymen.

Telling the division commander to be ready to "immobilize" the dam, but only if the Chinese threatened to release the water in the reservoir, Hoge gave him a company of Rangers. One hundred skilled soldiers trained for rapid and hard-hitting movement, the Rangers would be perfect for a raid to knock out the machinery. By joining these elite troops to the division, Hoge formed a team that was bound to succeed.

While the Rangers were moving by truck to the Kansas line, their commander, Captain Dorsey B. Anderson, drove to division headquarters. He had studied the map and had a notion of how best to carry out the task. A quick hit-and-run affair was just the sort of thing his men were good at.

He went to see the division G-3, a young lieutenant colonel named John Carlson, who planned the combat operations.

If it became necessary to get up to the dam, Anderson suggested, his Rangers could cross the reservoir in boats during the night. They could slip to the dam under cover of darkness and knock out the mechanical hoists before the Chinese knew they were there.

"Where are we going to get the boats?" Carlson asked. It was a rhetorical question. Getting the boats was none of Anderson's concern. "That's an awful lot of water to cross. If you blast the dam during the night, you'll have to come back during the day. You'd be sitting in the middle of the lake in full view of the Chinese!"

Anderson agreed, but he still thought that crossing the water was the best way to get to the dam. Carlson said, "No. We have to figure out something easier."

While he searched for a solution to the problem, Anderson visited a nearby dam that the experts believed was similar to Hwachon. In case he had to destroy the machinery, he wanted to know in detail how to do it. Looking over the concrete structure, he became familiar with the mechanism and saw how to blow the cogs on the power wheels that controlled the floodgates. At Hwachon Dam, in each of the 18 winch hoists where exposed gears meshed, his men would have to apply thermite grenades directly to the teeth, then tamp them properly to ensure a good burning effect. The Rangers would have to hold the dam for several hours to close the gates and make sure the demolition charges did the job.

Were the Chinese then planning to use the water in the reservoir as a weapon? Were they raising the water level in order to inundate the Corps by opening the penstocks and gates?

As the Rangers took a brief refresher course in the use of explosives, Anderson flew over Hwachon Dam in a light plane. The ground appeared even more rugged than he had anticipated. But he had one consolation: He could discern no enemy positions around the structure. Even with no Chinese opposition, the Rangers would find it difficult enough to get over the terrain. The hills would cause problems for men walking across the slopes and around the jagged, contoured heights. If his men had to cross the reservoir in boats, they would have to traverse about a mile of ground between their landing site and the dam.

But Carlson favored an overland attack—without frills, nothing fancy. In getting to the Kansas line, the division had had no easy time, but the Chinese, when attacked aggressively, had pulled back, even from well-organized defenses. Why should an advance beyond Kansas be different? The dam was probably lightly held, and it could easily be overrun and its sluice mechanisms quickly destroyed. One of the division's three regiments, the 7th Cavalry, was directly below the dam, and if General Hoge gave the green light, it could go around the edge of the reservoir, grab the dam, and let the Rangers walk in and blow the power wheels.

A minor problem arose: The division was about to turn over its part of the front to a relieving Marine division. Once the transfer was complete, the troops would leave the Kansas line and travel far to the rear for a well-earned rest.

The relief would take place on two successive nights, starting on the evening of 9 April. Just in case Hoge ordered the raid to Hwachon Dam, Carlson scheduled the division's departure so that the 7th Cavalry would be the last to leave.

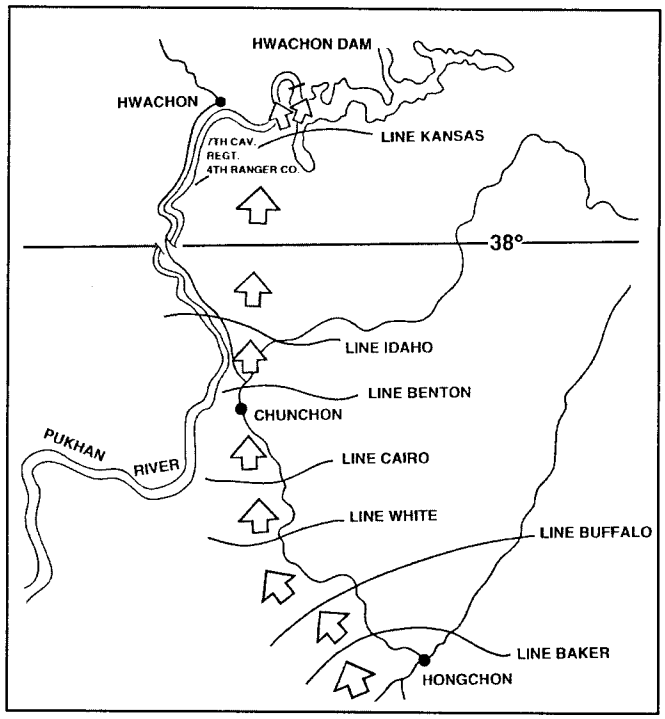
Since a rise in the Pukhan River would trigger Hoge's decision to go to the dam, the water level was watched closely at three measuring stations.

In the dark and early morning hours of 9 April, as interrogations of prisoners of war would later reveal, about 20 Chinese soldiers and five Korean civilian employees of the power plant began to open the gates of Hwachon Dam. Using auxiliary engines to lift some, they opened others manually. By daylight they had raised two gates completely, lifted two of them three-fourths of the way, and opened six slightly. Had they been able to raise additional gates, they probably would have done so.

Before the American pilots who made daily inspections could fly over the dam and discover the open gates, a surge of water struck the first measuring point along the Pukhan River. At 0700 the river began to rise, and the level rose by four feet in 15 minutes. Downstream at the second station, the river began to rise an hour later, and by 1000 the stream was 86 inches, more than seven feet, above normal. Farther downstream, at the third station, the Pukhan jumped 17 inches in ten minutes after 0930, 27 inches during the next 20 minutes, and climbed steadily to just over seven feet by 1230.

By opening ten of the 18 gates, the Chinese had released enough water to wash away one American treadway bridge supported by pontoons and to require the Corps to disconnect four others to avoid losing them. All were major installations, and they would have to be replaced, raised, and lengthened—a tedious, time-consuming task.

As soon as Hoge learned that the Pukhan River was rising, he told the 1st Cavalry Division commander to get to the dam,



shut off the flow of water, and put the machinery out of order. There was plenty of time to do so before the division left for the Kansas Line.

Major General Charles D. Palmer, who had taken command of the 1st Cavalry Division in early February, was preparing to turn over his front to the Marine division. So far as he was concerned, the relief took precedence over Hwachon Dam. Passing on Hoge's instructions, Palmer's G-3 (Carlson) instructed the 7th Cavalry to go beyond the Kansas Line, "if possible."

The 7th Cavalry transmitted the mission, along with its ambiguity, to one of its three battalions. "Be prepared to be relieved tomorrow" (10 April), read one message. Then another: "Go up there [to the dam] if possible, stay there, do not get cut up, but do not withdraw unless necessary. If you can close locks, do so. If not sure how to operate and likely to damage, leave them alone. Destroy machinery if necessary to pull out."

Somewhat puzzled but expecting light resistance, the battalion commander, Lieutenant Colonel John W. Callaway, sent one of his three rifle companies to attack at noon on 9 April. The Rangers were just behind and ready to go forward to close the spillway gates and destroy the machinery.

Callaway's troops barely moved beyond the Kansas line before striking well-concealed but active Chinese defenses. Captain Harold Gray, Jr., commander of Company F, was killed almost immediately, and the advance came to a halt.

When Callaway received a report that the men were unable to move because they were suffering heavy casualties, he went forward to get the details first-hand. The ground was so rough that it took him all afternoon to reach the riflemen. It was dark by the time he arrived. He discovered that the report of high losses was exaggerated. Two men had been lost: the dead commanding officer and a severely wounded soldier.

Judging the terrain too broken for proper control during the night, Callaway held off further attack. He made sure his troops would be ready to resume the effort in the morning, and returned to his command post.

At around 0100 on the following morning—10 April—Callaway learned that most of the division was leaving the Kansas Line; his own attack was still on, so he ordered his troops to get to the dam after daybreak.

The decision to continue the attack had been reached earlier that evening by Hoge, who told Palmer to go on up and get the dam.

General Palmer and Carlson discussed the possibility of sending the Rangers across the reservoir in boats. Since Callaway's thrust had uncovered strong resistance, Carlson still believed it was too dangerous to cross a mile of open water. And it was too complex. Much simpler was Callaway's overland effort, particularly since the division was to complete the relief as scheduled—that is, during the night of the 10th. The loss of only two men in Callaway's assault company indicated that the attack had probably bogged down because of the death of the commander rather than the strength of the opposition. Continuing to press forward would surely drive the enemy from the approaches to the dam, scarcely two miles ahead.

Hoge's understanding was quite different. He expected the Rangers to cross the reservoir that night, and this he told to Ridgway.

When Hoge visited Palmer on the morning of the 10th, he learned that Callaway's second attack, like the first, had gotten nowhere. Running into murderous fire, the troops made no progress beyond the Kansas line. In the process, six troopers were killed, 27 wounded. While visiting the observation post with Callaway, First Lieutenant Richard Gerrish, Jr., commander of Company H, was killed by fragments of an enemy mortar round. Callaway himself narrowly escaped injury or death from the same explosion. Now he faced the loss of *two* company commanders.

Where were the Rangers? Hoge asked.

Palmer explained: An operation across the lake hardly seemed worthwhile. Two of the regiments, along with the engineers and other elements, had already gone to the reserve area. Only the 7th Cavalry remained in the line, and it was due to leave that night. Getting involved in the complications of an amphibious assault might delay the relief.

Hoge's face turned a deep red. "I want you to stop fooling around," he told Palmer. "What I want is a bona fide attempt to take the dam."

As Hoge was applying the whip, the Chinese were closing six gates of Hwachon Dam. Why they did so was a mystery, but the result became noticeable around noon. The water level of the Pukhan River, which had remained about six feet above normal, started to subside. The danger of flooding began to diminish.

What now? Was there any point in continuing the attack?

Hoge's answer came early that afternoon: He had changed his mind. The Marines were to take over from the 7th Cavalry during the night, thus completing the division's relief.

Colonel William A. Harris, commander of the 7th Cavalry Regiment, was delighted. He had deep affection for the troop-

ers entrusted to his care. They had fought over extremely difficult terrain for several months, and he knew how worn out they were.

Telling his three battalion commanders to terminate their operations at 1700, Harris authorized them to start walking their troops to the rear that evening. They would meet the trucks that had brought the rest of the division to the reserve area and that were coming back to pick up the 7th Cavalry.

Exactly at 1700, Harris received word that Hoge had changed his mind again: There would be no relief until the Hwachon gates were knocked out.

The decision may have seemed like personal pique on the part of Hoge. Not only was the level of the river falling; the reservoir had lost so much water that a volume of no further consequence to the Corps bridges was flowing through the four gates that were still open. No one knew exactly how much water was left in the reservoir, for the weather had turned rainy and foggy, and aerial observation was impossible. But an estimate of the volume of water that had passed over the dam indicated that the level in the reservoir was low—so low that what was being held back could no longer be destructive.

Why, then, was Hoge insisting on shutting the gates? Because the Chinese could play a vicious game. They could build up the water in the reservoir, then release another flood. If they got some portable electric generators to work the massive doors, they could harass the Corps quite easily. Furthermore, the rainy season lay ahead. If the Chinese released the water during a heavy rainfall, they might wash out even high-level bridges (a rise in the Pukhan River as high as 18 feet from a heavy downpour was a matter of record). Thus, despite the absence of an immediate danger, a long-range menace persisted.

This bothered Hoge, but what bothered him more, he later said, was his feeling that the halfhearted thrusts toward the dam had stirred up the enemy. The division had frittered away time and resources, and had dissipated hope of gaining surprise.

If Hoge allowed the relief to be completed as scheduled, if he assigned the Hwachon Dam mission to the Marines—who would need at least a couple of days to settle in—he would lose more time. He would enable the Chinese to prolong their game with the water and further improve their already strong defenses. In the interest of speed, the 1st Cavalry Division, specifically the 7th Cavalry, had to take care of the gates.

Coming ashore about a mile from the dam, the Rangers would make a quick run to seize the installation, close the gates, smash the hoisting machinery, and be gone as quickly as they had come.

Palmer and Harris were sick with dismay. Scheduling a unit's relief, then giving it a combat assignment, takes the heart out of its people. No one about to be relieved wants to move into attack. Everyone would be looking over his shoulder toward the promised relief and rest. But there would be neither relief nor rest until the machinery was knocked out.

Since the overland route to the dam seemed fruitless, Palmer and Harris decided to send the Rangers across the water. Coming ashore about a mile from the dam, the Rangers would make a quick run to seize the installation, close the gates, smash the hoisting machinery, and be gone as quickly as they had come. To divert the enemy's attention, Harris would launch two diversionary efforts, each by a battalion. His third battalion would be ready to cross the reservoir if the Rangers needed help.

The plan was fine, but the decision to carry it out could not have come at a worse moment. Not only was most of the division far to the rear in reserve; almost all its trucks were tied up in this movement. Everyone would have to scramble at the last minute to get the equipment and supplies required for the combat operation.

The news that the Rangers would cross the reservoir that night came as a surprise to Captain Anderson. It was rather short notice for a complex operation of this sort, he felt, and somewhat late; by the time all the troops and equipment were assembled, only a few hours of darkness would remain. But he made no protest. His men were ready! The relief had no effect on them. They would be pulled out of the front as soon as they completed their mission.

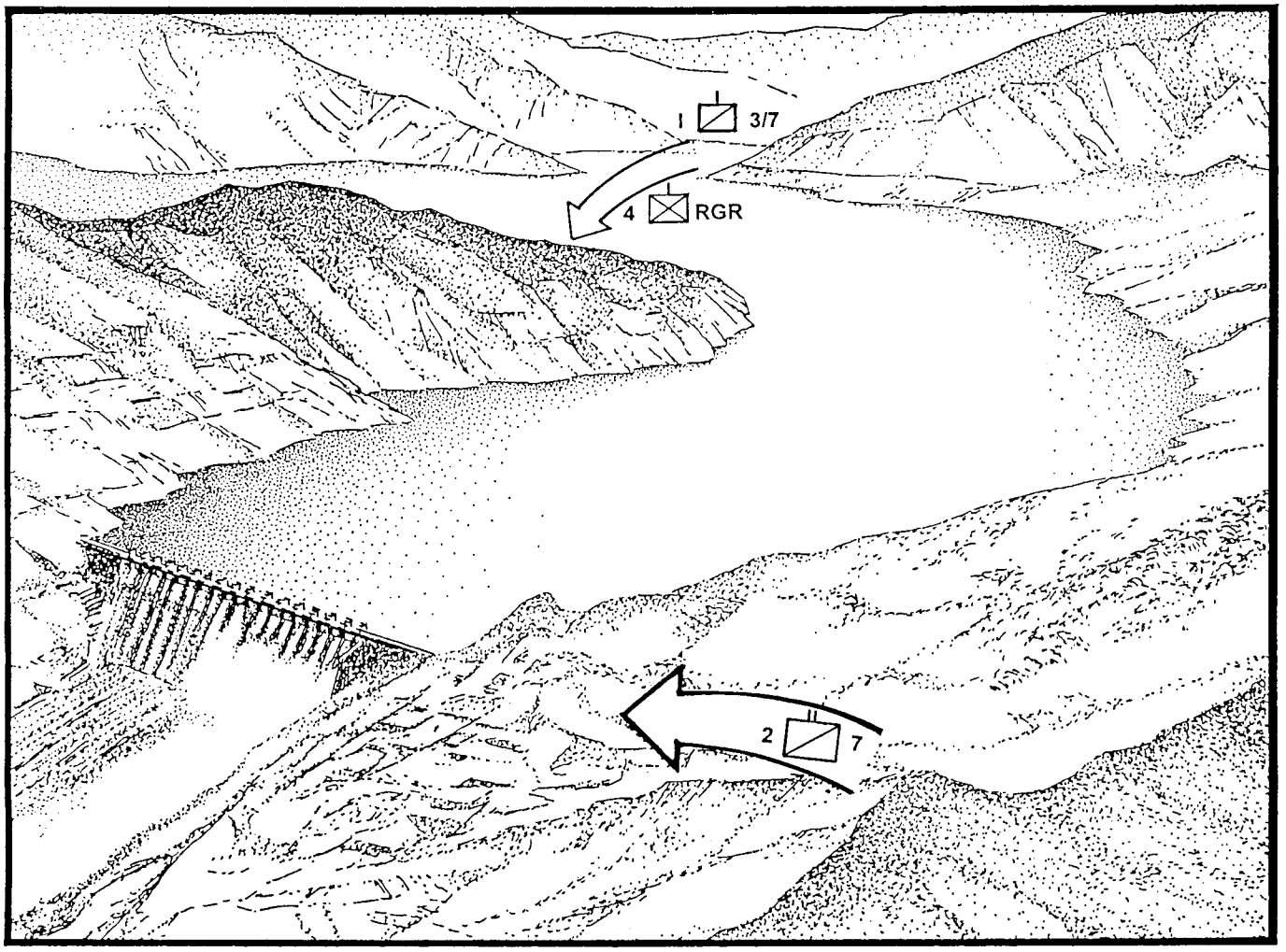
After sending word for the men to be marched to the embarkation point on the shore of the lake, Anderson met his executive officer and his three platoon leaders there at 0230 on 11 April.

Anderson told his subordinate officers that no one knew how many Chinese defended the dam. The resistance stirred up by Callaway—in particular the number of Chinese mortars firing—had led to conjecture that the enemy troops in the area outnumbered the Rangers. For that reason, they were to paddle across the water, using no motors unless they were discovered. Their best hope of reaching the dam lay in an approach using stealth and surprise. To add firepower, about 20 machinegunners and mortarmen of the 7th Cavalry would accompany them. From the near shore of the reservoir would come supporting fires. Artillery would also be available.

The artillery actually in support of the Rangers consisted of 32 pieces, all 155mm and 8-inch howitzers. These large guns would be firing at their longest limits of effective range—the 155s from about nine miles away, and the 8-inch howitzers from around ten miles. Firing at extreme ranges was not good, for the longer the distance, the broader the dispersal of shells at the target. It also wore out the tubes more quickly. But the pieces were unable to come closer because of the paucity of roads around the dam.

His instructions delivered, Anderson supervised the issue of additional ammunition to the men. They moved to the shore of the reservoir for embarkation. It was cold, and a damp fog blew in off the water. Tension began to build among the troops.

Near Chunchon, at division headquarters, Major Dayton F. Caple, the G-4, was frantically trying to collect the equipment and supplies needed for the operation and get them forward. His first thought was to find at least six DUKWs (amphibian trucks) to carry the Rangers across the reservoir. Less than a



week earlier, the division had obtained a dozen for crossing the swollen Pukhan River above Chunchon, but facing no other water obstacles on the way to the Kansas line, Caple had let them go that morning to the Marines and the division on the immediate right in the adjacent corps. Although he acted at once to call them back, the absence of roads in the forward area held up their movement.

Caple then tried to get boats. An assault boat—made of plywood, weighing 410 pounds, powered by an outboard motor or paddles, and usually handled by three trained soldiers—was standard engineer equipment normally used in constructing a pontoon bridge. Early that month, the division engineer had procured 40 assault boats and a dozen outboard motors. But when the Hwachon operation was ordered, the boats and motors, along with the trained operators, were moving with the engineers into the reserve area. A radio message got 20 boats and some motors started back. Ten, somehow, wound up on the wrong side of the Pukhan River. They finally reached the embarkation site shortly before noon on 11 April—too late for the Rangers to use. Fortunately, the other ten had arrived in time, but barely so.

Because of the lack of clear roads, all equipment and supplies had to be transferred to jeeps, and even jeeps in four-wheel drive had trouble gaining traction. Finally, four miles short of the reservoir, the trail ended. Equipment and supplies had to be transferred again, to the backs of Korean laborers. Finally, ten boats, ten motors, 180 paddles, and 20 air mattresses were brought to the embarkation site.

The air mattresses were an inspiration. They substituted for the requested life preservers, which did not arrive until well after the Rangers had departed.

Ten boats, some with outboard motors, were assembled at the embarkation point before dawn on 11 April, but one had a hole in the bottom and was useless. Since each boat could carry ten men, some Rangers would have to wait until boats returned from the far side of the reservoir for a second trip.

In each boat was an infantryman who would be responsible for bringing the craft back after the Rangers clambered out on the far shore. Lacking trained operators, the 7th Cavalry had sent out a call for volunteers, asking infantrymen who had any kind of experience with boats and motors to come forward. A lieutenant who volunteered found himself in charge of 20 soldiers who were willing to take the Rangers across the reservoir. Their valor was as great as their inexperience.

Lieutenant Michael D. Healy's platoon got into three boats to make the initial excursion. Healy had a "killer" element of ten men—armed with knives, axes, grenades, pistols, and carbines—who were to eliminate, quickly and quietly, any enemy

troops at the landing site, a demolition group responsible for placing explosives at the dam, and a squad carrying automatic rifles and machineguns.

Pushing off at 0345 and guided by compasses, the men paddled across the smooth lake. Forty-five minutes later, the first boat scraped the bottom of a rocky bank. Healy jumped out and pulled the craft up on the shore. After giving his medical aid man a flashlight with a blackout cover to guide the other boats in, Healy, together with five men, verified the absence of Chinese troops in the immediate landing area.

When the rest of the platoon was ashore, Healy left two men at the inlet as guides and took the others up the sharp incline of a finger ridge that led to the base of a mountain peak.

On the other side of the reservoir, Lieutenant Joseph W. Waterbury's platoon, together with Anderson, the forward observers, and the machinegunners, stepped into the remaining six boats when Healy's men were about 50 yards out in the water and disappearing from sight. They reached the landing cove as the sky was showing the first signs of light.

Anderson led this contingent up a parallel finger ridge and met Healy at the base of the height. He quickly organized the 70-odd men for the advance up the steep slope of the mountain. With Healy's platoon in the lead, Anderson's command group immediately behind, and Waterbury's platoon following, the Rangers started up the hill.

Out in front of the rest, Healy and five soldiers were about 100 yards from the top when they heard shouting. Looking up, through the heavy morning mist, they saw the indistinct figures of about half a dozen men on the crestline waving in welcome. It was impossible to tell whether they were enemy troops or members of the 7th Cavalry who had managed to get to the dam overland. Waving back, Healy's men continued to climb the hill.

Behind them, Sergeant George E. Schroeder, who was walking with the forward observers, heard the shouting, glanced up, and thought that some Rangers had already reached the hilltop. Why were they so noisy? Was the dam already captured?

Two men had dragged their machinegun up the hill, and they opened covering fire while Healy and his lead scouts threw grenades and assaulted the Chinese machinegun nest.

The men in the lead covered another 50 yards up the slope when the increasing light of the morning revealed that the troops on the top of the hill were wearing the Chinese quilted uniform. But as long as they kept waving and shouting in a friendly manner, the Rangers continued. Maybe the Chinese wanted to surrender.

A burst of machinegun fire shattered the illusion. All hope of gaining surprise and reaching the dam undetected vanished as everyone on the slope fell flat. But not before two men were hit. A radio operator accompanying a forward observer was killed instantly, and another man got several bullets in the leg.

On the slope of the mountain, Rangers in prone positions began returning the enemy fire. Forward observers called in mortar and artillery rounds, which dropped up ahead in slow cadence.

Healy, accompanied by his group of five, crept toward the top of the hill, trying to locate the enemy weapons. Behind them several men fired a recoilless rifle, whose roar was as loud as a clap of thunder and whose backflash was as potent as a jet engine's. After they got off several rounds, one enemy machinegun fell silent. Shifting to the left, the men tried in vain to search out the other machinegun position. Halfway up the hill, a sergeant had his troops assemble two machineguns and lay down grazing fire to cover Healy's advance. Before the guns could expend a mere three boxes of ammunition—750 rounds—some Rangers, to the sergeant's astonishment, were at the top of the hill.

At the ridge line, Healy raised his head several times to draw fire so the other enemy machinegun could be spotted. When Healy saw where the position was, he and his group moved off without command, creeping to within grenade distance.

Two men had dragged their machinegun up the hill, and they opened covering fire while Healy and his lead scouts threw grenades and assaulted the Chinese machinegun nest. As they knocked out the gun and killed the crew, other Rangers rose to their feet and charged up the hill, shooting while they screamed to bolster their courage. A dozen Chinese troops fled across a draw and disappeared.

It was now 0615. Two and a half hours had passed. The Rangers had taken their initial objective and were about half a mile from the dam. They were winded from the ascent, but they began at once to dig foxholes. Ahead, obscured by the morning fog and a jumbled mass of peaks, was the dam. Behind them and off to the right and left was the lake, separating them from their friends.

Schroeder spread a bright red silk panel on the hillside. If pilots came over to bomb and strafe the enemy after the morning mist lifted, they would know where the Rangers were.

About that time, it started to rain. The rainfall would be light and intermittent, but the sky would remain covered throughout the day. There would be no air support for the Rangers.

Two boats, each paddled by an individual crewman, had returned to the embarkation point after carrying Rangers across. Since the noise of the weapons on the far shore indicated the Rangers had been discovered, there was no reason to remain quiet. The men tried to start the motors to get the last platoon (Lieutenant James L. Johnson's) more quickly across the water. Neither motor would start.

Two of Johnson's three squads paddled across the reservoir between 0600 and 0700. They were guided into the landing site by medical technician Sergeant William V. Goolsby, who was waiting to send a wounded man back.

Johnson and his troops unloaded the boats, ascended one of the finger ridges, climbed the peak, and made contact with Anderson. It was close to 0800.

At the cove, Goolsby placed the wounded man into one of the craft and helped the crewman shove off for the return trip. Then walking up the hill, he found everyone digging foxholes. Some mortar rounds were coming in, mostly white phosphorus, and two men had been burned, though not seriously. He treated them, then started to dig a hole for himself.

At the embarkation point, where two more boats had returned, the final squad of Johnson's platoon, plus the company executive officer (Lieutenant John S. Warren) and six Korean carriers with a load of ammunition, climbed aboard. The motors started and quickly powered the men across the reservoir. As the craft headed for the landing cove, the morning mist lifted. The Rangers were hardly surprised when enemy fire came from their left front. As machinegun bullets stitched the water around them, they turned to the right to escape. When more shots came in, they tried a third landing site. Another burst of fire convinced them they would be unable to get ashore without losing men and probably, even more important, the ammunition. Both boats returned.

On the far shore, the enemy fire that had dissuaded the two boats from landing prompted Anderson to a decision. If he moved the Rangers inland and toward the dam, he explained afterward, he thought he might be cut off from the beach by Chinese troops coming in on his flanks. If, instead, he extended his line to the left and seized another hill overlooking the shore, he would not only secure his exit but also facilitate subsequent landings that would bring him reinforcements and ammunition.

Anderson sent Johnson and his men through Healy's platoon and along a finger ridge toward the hill knob he wanted. Johnson had scarcely started when the zing of machinegun bullets and the whine of mortars sounded. Projectiles peppered the ridge and stopped his advance. His men took cover, falling to the ground and burrowing their heads beside a rock outcropping and trying to hide in the short and scraggly brush.

Fifty or 60 Chinese troops charged in from the right front. They reached grenade distance before being beaten back.

This attack, Anderson said later, was merely a ruse to draw the Rangers out of position. For immediately afterward, a mass of what seemed like several hundred screaming, bugle-blowing Chinese soldiers poured down from the right and threatened to overwhelm the Americans. Making no effort to use covering fires, the Chinese bore directly down against the Rangers.

No one could remember—or if he could remember, tell—precisely what happened during the next 30 minutes. No one was sure any longer exactly what he had done, how he had reacted, what he had seen, or even how long it lasted. Schroeder thought he threw grenades for half an hour, then remembered that he had had only two. Healy talked about the bugles.

"Let me put it this way," Anderson said, trying to explain what took place. "The approaching Chinese were so densely packed and so close that my pistol was more effective than a machinegun."

Waterbury had his radio damaged by a rifle bullet. He sent a runner to tell Anderson he had to pull back. As the soldier departed, crawling through the sparse brush toward the company headquarters, a grenade sailed through the air and exploded, knocking Waterbury down, half conscious, and sending him rolling down the hill. He had no idea how far he tumbled or how long he lay where he came to a stop.

The Rangers finally drove the Chinese off. A lieutenant named Forney, who brought in artillery fire, and the 4.2-inch mortar observer worked beautifully together, the latter compensating for the slow rate of artillery shelling. The man calling in the fires of the 81mm mortars was too nervous to get his

ONE SOLDIER--ONE RECOILLESS RIFLE

Although the attempt to seize the Hwachon Dam did not succeed, it was nevertheless a commendable effort, both in light of its purpose and in terms of the initiative and courage of the soldiers who took part in the operation.

The three main factors leading to the decision to withdraw the 4th Ranger Company and Company I, 3d Battalion, 7th Cavalry, from the area east of the dam were the loss of the element of surprise, the impossibility of conducting a supporting attack in sufficient strength, and the unexpectedly large number of Chinese occupying the high ground and the dam itself. Given the number of troops involved on both sides, U.S. casualties were surprisingly light, and this was due in large part to the actions of one man, Private First Class Jose "Joe" Alva, a 57mm recoilless rifle gunner from Company I.

When Company I crossed the lake under Chinese small-arms and mortar fire to reinforce the Ranger company, Private Alva and his recoilless rifle were among the first ashore. Seeing that friendly units were unable to advance because of the intense fire of Chinese machineguns, he moved forward and destroyed four machinegun emplacements. When an advance squad was pinned down by automatic weapons fire, he unhesitatingly moved forward alone over 100 yards of exposed terrain, carrying the recoilless rifle and dragging his ammunition. Private Alva assaulted and eliminated three more Chinese emplacements, and when he ran out of 57mm ammunition, he picked up an M1 Garand rifle and continued the attack.

Joe Alva's heroism inspired others in his unit to fight on, and he finally occupied a fighting position in the Rangers' perimeter until ordered to withdraw. If the Chinese machinegun positions had not been destroyed, the two companies would have been forced to withdraw across the reservoir under heavy fire, and would have almost certainly sustained heavy losses. Private Alva was awarded the Bronze Star Medal with "V" Device in recognition of his heroism and devotion to duty.

Today, as on 11 April 1951, victory on the battlefield still lies in the hands of those brave, selfless soldiers whose coolness under fire inspires their comrades and inflicts enough casualties on the enemy to destroy his will to fight. That's the way it has been in all of our nation's wars, and that's the way it must continue to be as we enter the next century.

rounds on target; his radio operator had been the first to be killed shortly after the landing.

When the Chinese attack died down and the survivors had pulled back, Anderson checked his troops. They still held about 400 yards along the ridge line. But they were just about out of ammunition. They had half a box of machinegun bullets, only four rounds for the recoilless rifle, two clips of pistols bullets, about two clips per rifle, and 30 rounds per carbine. They were out of automatic rifle clips and grenades.

Since the strength of the Chinese ruled out an advance to the dam and since the lack of ammunition made his positions untenable, Anderson radioed the 7th Cavalry for permission to return across the reservoir.

He was told to stay; he would soon be joined by a rifle company, which was on its way across the water. Unless the infantrymen arrived quickly, the Rangers would be unable to withstand another Chinese attack. Anderson instructed his men to fix bayonets. Those who had no bayonets attached knives to their weapons.

The time was about 1200 on 11 April. It seemed much later.

While the Rangers were crossing the reservoir that morning, the 7th Cavalry launched its two diversionary attacks. One battalion sent an assault company to cross the Pukhan River. Under rain mixed with sleet, the men descended a steep slope to the water, sliding and slipping on the thin layer of mud that barely covered the rock core of the hill. They planned to cross on several footbridges thrown up days earlier, for the rugged ground prevented them from carrying boats to the river's edge and the swift current prohibited paddling across on air mattresses. At the bank of the river they discovered that the water level had risen and washed out the bridges. All they could do—even though they saw no enemy troops—was to fire across the stream, call in artillery shells, and hope they had mounted a threat that kept some Chinese away from the dam.

The other battalion (Callaway's) attacked for the third day and ran into the same enemy pillboxes. An officer who had been with the Marines at Iwo Jima later said that the Chinese put out more mortar fire than the Japanese ever had. A sergeant who had fought in Europe said that the Siegfried Line defenses were the only comparable positions he had ever seen. Lacking air support because the bad weather kept the planes on the ground, with attempted precision artillery fire making no impression on the fortifications (the pieces were too distant for pinpoint accuracy) and deprived of the help of tanks because there were no roads, the battalion tried to divert attention from the Rangers and lost 28 men, of whom three were killed.

Since the weather had killed any air support, and since the artillery assistance was not the best, he began to doubt that the losses being suffered were worth the goal.

As early as midmorning, Colonel Harris, the regimental commander, concluded that the two attacking battalions would have little success. Because the Rangers had been discovered, he judged they would need reinforcement and decided to send his third battalion across the water. One company of that battalion had already marched to the embarkation site, and shortly before noon Harris ordered the 200 men across.

By this time, the ten other assault boats sent by the division engineers, as well as the life preservers, had reached the shore of the reservoir.

Climbing into the craft, the infantrymen tried to get the outboard motors started. None worked. It was early afternoon before the first boats departed. Lieutenant Warren, the Ranger company executive officer, who had been unable to get across earlier, accompanied the infantry to show the way.

Half the distance across the water, the men ran into a volley of mortar shells. One boat was hit and damaged slightly; one soldier was wounded, not seriously. Continuing to paddle, the men reached the far shore. They beached their craft around 1330, immediately positioned guards around the landing site, and awaited the arrival of the rest of the company.

When Warren stepped out of his boat, he met Waterbury, who was still dazed from his tumble down the hill. Waterbury felt vaguely guilty because he was not badly hurt—a cut on his hand was bleeding slowly, and his legs wobbled. He wanted to take some boats to a beach directly below the Rangers to get ammunition up the hill more quickly and also to help evacuate the wounded.

Warren assured him that he would look after the ammunition and casualties, then helped him into a boat that was about to return across the reservoir.

As Waterbury was being transported back, the last squad of Johnson's platoon, the Korean carriers, and a load of ammunition appeared at the inlet. Soon afterward the rest of the infantry company arrived.

When Anderson saw the final contingent of his own force and the company of infantry approaching, he felt pretty good. With 300 Americans on the hill and plenty of ammunition, it would be difficult, if not impossible, for the Chinese to dislodge them. And now they could get started toward the dam. It was about 1600.

An hour earlier, General Palmer, 1st Cavalry Division commander, had telephoned the 7th Cavalry to learn how things were going.

Colonel Harris, the regimental commander, was cautiously hopeful. He thought there was little chance of taking and holding the dam that day, but he believed it might be possible to get three companies of infantry—in fact, the whole battalion—across the reservoir. That would enable the Rangers to get to the dam during the night and blast the machinery. Around daybreak, all the troops could get out. How did that sound?

That sounded all right to Palmer, and he gave his OK. Then he telephoned Hoge to pass on the information.

To Hoge, the corps commander, the dam appeared to be defended in surprising strength. What were the Chinese up to? Intelligence had failed to estimate anywhere near the correct number of Chinese around the dam. In addition to the unexpected opposition, Hoge revised his understanding of the ter-

rain. What he had originally conceived of as separate compartments were in reality interconnected areas. Seizing the dam required the capture of a sizable parcel of ground around it. Taking that much ground demanded at least an entire division. Since two-thirds of the 1st Cavalry Division had already left the Kansas line, he would have to use the Marines. But if he sent the Marines forward in a full-scale attack, he would have to commit more troops to cover their flank. He would be getting involved in a major attack beyond the Kansas line, which was unauthorized. And Ridgway had said he wanted few casualties.

Hoge had to admit that the operation was getting out of hand. Since the flow of the Pukhan River had dropped off, even though the level remained relatively high, he decided there was no special need now for haste in taking the dam, no sense in being stubborn.

He told Palmer he would recommend calling off the operation. Unless, of course, the Chinese resistance suddenly disintegrated. If the Chinese abandoned the dam, the Rangers might as well knock it out.

Palmer called back Harris and passed along Hoge's thinking.

Well, what did Palmer want him to do?

Harris could call off the operation any time he wished.

He needed little urging. But he could not blindly end the action. He had made an investment. Perhaps it was worth hanging on a little longer.

He reviewed the situation. To take the dam, he estimated, he would need to send two more rifle companies across the reservoir. Since there was no fast way of getting them across the water, together with ammunition and other supplies, the positions established half a mile from the dam might be swept away during the night. Obviously, the Chinese would attack in strength after darkness fell. Since the weather had killed any air support, and since the artillery assistance was not the best, he began to doubt that the losses being suffered were worth the goal. To prolong the operation was simply asking too much of the troops.

Come on back, he radioed.

He wanted the Rangers to pull out first, covered by the infantrymen.

Anderson had three reactions in quick succession. First he was shocked; why call it off when there was a good chance now of getting to the dam? Next he was angry; what was the point in getting men killed for nothing? Then he relaxed; he had not the slightest desire to question the order.

When he put out the word to his men, he could almost hear the collective sigh of relief. No one wanted to spend the night on the wrong side of the reservoir.

Since any withdrawal from a forward position is a ticklish operation—troops are vulnerable when they move—Anderson asked for smoke, the artificial haze put out by smoke pots, generators, or artillery shells. "Negative," came the voice over the radio; no smoke was available.

Looking for smoke generators in the immediate area, the division G-4 found absolutely none. Instead of getting in touch with the corps chemical officer, who controlled smoke munitions, someone in the Corps G-4 section called the corps ordnance officer. Someone in that staff office phoned the army ordnance office in Pusan. From there a call went to Tokyo asking that smoke pots be airlifted from Japan.

There was no smoke to cover Anderson's withdrawal. Only the corps chemical officer seemed to know that there were plenty of smoke pots at a chemical dump near Hongchon, but he had no idea that anybody needed them.

As the Chinese remained strangely quiet, Anderson brought his men down the hill and safely to the cove. He sent a boat to an inlet closer to the hill, where Goolsby was waiting with the casualties.

Anderson made sure all his men were embarked before returning. He reached the original embarkation point at 2030. Somewhat idly, for he was too tired to be indignant and knew nothing about the condition of the trail across which they had come, he wondered why the DUKWs had arrived so late. The Rangers had to walk several miles to trucks that were waiting to take them back to Hongchon.

Up on the hill across the reservoir, soon after the Rangers pulled out, about 60 Chinese attacked the infantry company. The riflemen beat them back.

For the Rangers the Hwachon adventure had all but ended. Ninety-eight men and five officers, plus six Koreans, had crossed the reservoir. Two men were dead, and the man with the stomach wound would die the following day. Eleven others had been wounded, and one was injured, having broken his leg in a fall. The few infantrymen who had accompanied them had lost one man killed and one wounded.

Up on the hill across the reservoir, soon after the Rangers pulled out, about 60 Chinese attacked the infantry company. The riflemen beat them back. They estimated they killed about 45, but the figure was no doubt exaggerated.

The infantrymen had little sense of victory. They were filled with trepidation. The departure of the Rangers had removed all the boats from the far shore. Suppose the Chinese attacked again and drove them from the hill. How would they get off the beach?

Except for an occasional mortar and artillery shell dropping in, the hill remained calm. Just before darkness the boats returned. The men moved quietly off the height.

At the cove, while half the company formed a perimeter and stood guard, the others dug foxholes around the beach. When these were completed, half the men departed. Those who remained were gnawed by the anguish of insecurity. Again there were no boats to take them off.

It was well after dark by then. The day-long rain had soaked the soldiers' uniforms. A raw wind drove a sleeting rain that had a cutting edge.

Enough boats had returned by midnight to take everyone

off. Making a final check to be sure his men had left nothing for the enemy, the company commander was the last to shove off.

In the pitch-black darkness, the troops guided their boats toward the flickers of flashlights that Harris had ordered shown, despite the danger of provoking enemy artillery. The last elements of the company returned to the original embarkation point at 0130 on 12 April.

A total of 193 officers and men of the rifle company, plus 12 machinegunners, had crossed the reservoir to reinforce the Rangers. All had come back. Three men were wounded. No one was killed.

Exactly six hours earlier, General Hoge had sent General Ridgway a message: "Attempt to seize Hwachon reservoir unsuccessful, due to strong obstinate enemy resistance."

Callaway's battalion, in the three days his troops had tried to reach the dam overland, had lost 10 men killed, 56 wounded.

The circumstances of the Hwachon operation might have been the subject of an inquiry, particularly since there was a lull all across Korea as the troops settled into the Kansas line. But an entirely unrelated development had overshadowed the raid. On 11 April, at the height of the action, came the startling news that President Harry Truman had relieved General Douglas MacArthur as commander of UN forces in Korea and was replacing him with General Ridgway. As Ridgway flew to Tokyo, the events at the dam fell into obscurity.

Soon afterward, the reason the Chinese had put up such strong resistance at the dam became clear. They had been using the broken terrain to gather and conceal equipment and supplies for a gigantic build-up. On 22 April, they launched the first phase of an overwhelming spring offensive. They drove Eighth Army off the Kansas line, and in a week forced the UN troops back 30 miles. When the situation became somewhat stable again, the forward line of IX Corps was just ahead of Hongchon.

By then, the Hwachon Dam foray was already history. Few would remember the futile incident unless to remark that men sometimes die for the inconsequential. The corps had carried out an attack as a precaution against a danger that never materialized.

But who knows beforehand whether an imagined menace will become real? Who knows until afterward when the expenditure of men will lead to a decisive moment of triumph on the battlefield?

The Hwachon Dam operation turned out to be inconclusive. Except, of course, to the 13 Americans who died, to the 70 who were wounded and, no less, to the unknown and uncounted enemy soldiers who were killed and wounded.

LESSONS LEARNED

In a recent interview, Colonel John W. Callaway, now retired, stressed the importance of learning the lessons that the Hwachon Dam operation offers.

He feels that his decision to move forward to F Company's location to assess the situation first-hand–instead of ordering the continuing advance of the other companies–was not a good one. The lead company had met no resistance and was within 600 yards of the dam. Colonel Callaway feels that the Chinese resistance was not initially strong enough to halt a determined advance, and that the dam could have been seized that first afternoon and the mission accomplished if the attack had continued.

Another lesson is to verify initial reports, corroborating them whenever possible to ensure that command decisions are based upon the best and most accurate information available. The radio operator—the only person available to communicate with the battalion commander—was so shocked by the loss of the company commander that he was unable to give an accurate description of the situation on the ground. It is also important to stress the necessity that a unit's chain of command stay in communication with higher headquarters, particularly when the unit is in contact.

Colonel Callaway also feels that the attack could have succeeded if effective artillery fire and close air support had been available; the existing roads permitted moving assault boats forward and should have been used to displace artillery pieces forward as well. Instead, all artillery available was firing at maximum range and hence was ineffective, delivering only sporadic rounds within the target area. Finally, since air support was unavailable due to low ceiling, it was impossible to deny the Chinese freedom of maneuver on and near the objective.

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